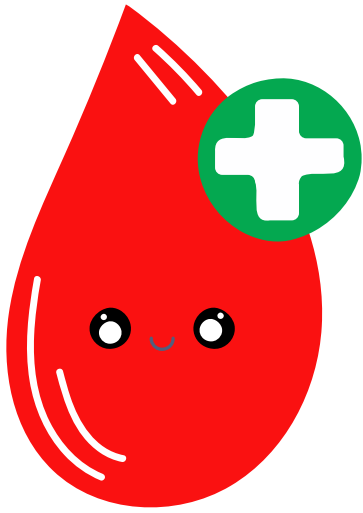


My Personal Blood Profile



Learn to look critically at your bloodwork and gain a better understanding of your health!



info@julieehealth.com

(310) 503-6336



My Personal Blood Profile

Name: _____ Date: _____

Disclaimer: the information contained in this document is to be used for educational purposes only and should not be used as medical advice. Always talk to your personal health care provider for specific information and guidance regarding your health and bloodwork. We hold no liability for information interpreted from this form, as it is not to be used for the purposes of medical diagnosis or advice.



We have all taken a blood test to help figure out what's going on with our health and ended up with a handful of results we have no idea what to do with. Sometimes things are out of range and our doctor says 'you're fine' or 'we'll watch this'. There's no time like the present to take our health into our own hands and be sure our health is exactly where we want it to be - free from disease. For this reason, I have finally put together a Personal Blood Profile Report. With this report, we are empowering YOU to take your results and your health into your own hands. For years I have been focusing on Optimal Ranges (for example 2-10) rather than the average ranges, which can often be 2-500 being 'within normal limits'.

This report has a large array of tests your doctor might have ordered for you. Now you can fill in the blanks and determine for yourself how you would best like to proceed forward to improve your health. Waiting and 'watching' a marker move further and further out of range is not intelligent. Why not be proactive and get your health the best you can make it. This tool is one of our Simple Solutions to help you get healthy right now! Save your results and compare to next year and the year after that. Be sure you are always moving in the right direction, toward optimal levels. We offer many nutrients, tools and healing strategies for you to take action once you fill in the blanks and determine what areas need more work.

This report is not meant to be all-inclusive, rather it is meant to give you a better understanding of what your blood report is telling you and allow you to understand your body better. Look for patterns. If 3 different reports point to your liver, well, listen to those words and start to regenerate a healthier liver. if 3 ranges suggest dehydration, well follow up with more hydration and electrolytes. Make sense?

Download this form and use it over and over again, comparing the same tests over time. That will provide you with the best information for yourself! Isn't it silly most labs do not track your report from year to year? It is time to be in charge of your health. Whether you work with our team, or 10 other healers and doctors, remember, at best they are guiding you. Ultimately it is YOU who is in charge of YOU - and you are the only person who lives inside your body, so take care of you!



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Metabolic Markers

BUN (Blood Urea Nitrogen)

My BUN is _____

Optimal is 10-18 mg/dl

BUN is a measurement of kidney function and protein utilization.

<u>Increased</u>	Increased BUN may indicate the kidneys are not functioning properly or are being overworked due to increased waste products, dehydration, infection, stress, or excess dietary protein intake. Supra-optimal levels may mean a decrease of water in blood.
<u>Decreased</u>	Decreased BUN may be due to liver dysfunction, a low protein-high carb diet, malabsorption, overhydration or pregnancy. Sub-optimal levels may mean excess water in the blood.

URIC ACID

My uric acid is _____

Optimal is 3.0-5.5 mg/dL for women

Optimal is 3.5-5.9 mg/dL for men

Uric acid is a waste product of protein digestion.

<u>Increased</u>	Increased uric acid may indicate gout, arthritis, arteriosclerosis, diabetes, alcoholism, decreased liver and/or kidney function, cardiac dysfunction, increased cellular destruction/ free radicals, violent exercise, and lead poisoning. Supra-optimal levels may indicate incomplete protein digestion.
<u>Decreased</u>	Decreased uric acid may indicate certain anemia's (low iron, B12, or folic acid), malabsorption syndromes, low



	molybdenum, pregnancy, and some metabolic defects. Suboptimal levels can mean poor enzymatic breakdown of proteins.
--	---

CREATININE

My creatinine is _____

Optimal is 0.8-1.1 mg/dl

Creatinine, along with the BUN, is a major indicator of kidney function. Creatinine is found in muscle tissue.

<u>Increased</u>	Increased creatinine indicates poor kidney function, excess ingestion or poor utilization of meat products, muscle disease, starvation, prostatic hypertrophy, decreased kidney blood flow, dehydration or hyperthyroidism. Supra-optimal levels mean increased muscle metabolism.
<u>Decreased</u>	Decreased creatinine may indicate difficulty in perspiring and therefore poor ability to excrete some toxic waste products. Often decreased in pregnancy. Sub-optimal levels indicate incomplete muscle build-up or muscle atrophy.

Chemistry Panel (Complete Blood Count)

Below is a section that used to be called a Complete Blood Count and is often now called a Chemistry Panel – it is very typical lab work most doctors order (when they are not being creative).

This test gives a great deal of information. It tells us if you are anemic, have an infection or depressed immune system, parasitic infestations, or allergic tendencies. It is broken down into the following components:



HEMOGLOBIN

My hemoglobin level is _____

Optimal for women is 13.5-14.5 g/dL

Optimal for men is 14.0-15.0 g/dL

Hemoglobin is the main component of red blood cells. It functions as the vehicle for transport of oxygen and carbon dioxide. Hemoglobin requires iron for its formation.

<u>Increased</u>	Increased hemoglobin may be due to dehydration, asthma, emphysema, respiratory distress, overworked adrenals, diarrhea, congestive heart failure, hyperthyroidism, lupus, kidney disease, vit B ₆ deficiency, or an overactive spleen. See also indications for increased RBCs.
<u>Decreased</u>	Decreased hemoglobin is due to anemias, especially iron deficiency anemia. Other causes include parasites, liver or kidney dysfunction, gastritis, deficiency of vitamin C, B ₁ , B ₁₂ , folic acid or iron, low protein intake, or adrenal exhaustion.

HEMATOCRIT

My hematocrit level is _____

Optimal level for women is 37-44%

Optimal level for men is 40-48%

The hematocrit is the percent of packed red blood cells.

<u>Increased</u>	Increased hematocrit indicates a hyperactive spleen, infections diarrhea, dehydration, or lung pathology.
<u>Decreased</u>	Decreased hematocrit indicates inadequate red blood cell production or increased loss or breakdown of these cells. Seen also is gastritis, adrenal exhaustion, kidney/ liver dysfunction, rheumatoid arthritis, parasites. See indications for decreased RBC.



WBC (White Blood Cell Count)

My WBC level is _____

Optimal level is 5000-7500 per microliter

These are the cells of the immune system that are involved in protecting the body against foreign invaders.

<u>Increased</u>	Increased WBC indicates an infection. Having an increased WBC while there is an infection is a sign your body is responding appropriately. Sometimes the body may need some support with nutrients and/or herbal products to make sure the immune system does not get overwhelmed and unable to function properly. Other causes include adrenal exhaustion, asthma, emphysema, free radical pathology, and late pregnancy.
<u>Decreased</u>	Decreased WBC count suggests one of two things: a chronically depressed immune system that is not functioning up to par, or an infectious process that has overwhelmed the immune system. It is seen with deficiencies of B ₆ , B ₁₂ , and folic acid.

RBC (Red Blood Cell Count)

My RBC level is _____

Optimal level for women is 3.9-4.5 mcL

Optimal level for men is 4.2-5.6 mcL

This is one of the measurements for anemia. This reflects the oxygen carrying capacity of the body. When your levels are below optimal, you will feel tired and will fatigue easily.

<u>Increased</u>	Increased in RBC can be found in hypoadrenalism, dehydration and chronic disease where the body is not getting enough oxygen. The RBC value is also higher in infancy.
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<u>Decreased</u>	Decreases in RBC usually occurs when a person does not eat enough essential nutrients (iron, B12, C, Cu, B9, A) and can be indicated by fatigue, dizziness, shortness of breath, and/or heart palpitations. In some cases, it is associated with diseases and conditions that cause your body to produce fewer red blood cells than normal. For example, aplastic anemia, cancer, and certain medications.
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Anemia Indicators

The following three tests are called the indices and give us more information about the type of anemia, if present. Using these indices in conjunction with the RBC, hemoglobin and hematocrit usually tell us if there is a blood loss, B12, B6, folic acid or iron deficiency anemia.

MCV (Mean Corpuscular Volume)

My MCV level is _____

Optimal level is 82-89 fL

MCV is a measurement of the average size of your red blood cells.

<u>Increased</u>	Increased MCV may indicate a B12 or folic acid deficiency.
<u>Decreased</u>	Decreased MCV indicates chronic blood loss, a vitamin B6 deficiency, vitamin C deficiency, iron deficiency, low HCl production, lead poisoning, free radical pathology, parasites, or rheumatoid arthritis.

MCH (Mean Corpuscular Hemoglobin)

My MCH level is _____

Optimal level is 28-31.9 pg

This is the weight of hemoglobin in red blood cells.



Increased and **decreased** levels in this have the same indications as those for the MCV.

MCHC (Mean Corpuscular Hemoglobin Concentration)

My MCHC level is _____

Optimal level is 33-35 g/dL

The average quantity of hemoglobin present in a single red blood cell. Hemoglobin is the protein in your red blood cells that transports oxygen to the tissues of your body.

<u>Increased</u>	Increased MCHC occurs in certain genetic anemias and has the same indications as the MCV and MCH.
<u>Decreased</u>	Decreased MCHC indicates a potential iron deficiency, which may be generally caused by blood loss, low dietary iron, or in some cases, genetic conditions.

PLATELET COUNT

My platelet level is _____

Optimal level is 150-450 x 100/cmm

Platelets play a role in blood clotting and coagulation, vessel constriction, and release of important chemical mediators. This test is used to evaluate bleeding disorders and anticoagulant therapy.

<u>Increased</u>	Increased platelet levels can be due to splenectomy, trauma, rheumatoid arthritis, iron-deficiency anemia, acute infection, heart disease, liver/pancreatic disease, free radical pathology and tuberculosis.
<u>Decreased</u>	Decreased levels are seen in other types of anemia, depressed immune function, lupus, allergies, liver dysfunction, rubella, pneumonia, DDT and other chemical exposures, chemotherapy, and drug toxicity.



Nutrients

IRON

My iron level is _____

Optimal is 50-170 mcg/dl

Iron is an integral part of red blood cells. It can also act as an oxidant at high levels, causing free-radical damage to bodily tissues.

<u>Increased</u>	Increased serum iron will be found when there is a deficiency in cell production. Its evaluation should also include total iron binding capacity (TIBC). Levels are seen with pernicious anemia, folic acid anemia, B ₆ anemia, iron therapy, hemolytic anemia, hemochromatosis, hepatitis, fat emulsification problems, decreased hormone production, kidney dysfunction, and decreased toxin fighting ability.
<u>Decreased</u>	Decreased levels are caused by kidney problems, chronic infections, and hypochromic (iron-deficiency) anemias. This may also indicate vitamin C deficiency, parasites, gluten allergies and increased susceptibility to infection.

TIBC (Total Iron Binding Capacity)

My TIBC level is _____

Optimal is 240-450 mcg/dL

TIBC reflects the blood content of transferrin, which is a protein that regulates iron absorption and transport in the body. In conditions where the body is deficient in iron (or “iron-hungry”), the body's TIBC is increased. When the body has an excess of iron, the TIBC is decreased. TIBC measures how well the transferrin proteins are transporting iron around your body.

<u>Increased</u>	Increased TIBC levels are caused by inadequate dietary, iron-deficiency anemia due to hemorrhage, acute hepatitis, and
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	oral contraceptive. It is also elevated in children 2 1/2 to 10 years of age, and pregnant women in the third trimester.
<u>Decreased</u>	Decreased levels are caused by pernicious (B ₁₂ - deficiency) anemia, sickle cell anemia, thalassemia, chronic infection, hepatic disease, hemochromatosis, iron-therapy overload, and rheumatoid arthritis.

% SATURATION

My % saturation is _____

Optimal is 20-40%

A sensitive screening test for chronic iron deficiency anemia. Percent saturation measures the percent of transferrin that is bound to iron.

<u>Increased</u>	Increased levels in hemolytic or megaloblastic anemia, thalassemia, kidney disease, third trimester pregnancy, viral hepatitis, and iron overload states.
<u>Decreased</u>	Decreased levels indicate chronic iron deficiency anemia, chronic infection, tissue inflammation, and anemia of chronic disease.

CALCIUM

My calcium level is _____

Optimal is 9.2-10.0 mg/dl

Calcium is a mineral that is regulated very precisely by the body. When dietary calcium is insufficient, or there is an absorption problem the body draws calcium from the bones and teeth to maintain blood levels. When dietary phosphorus is high from ingestion of foods like soda and excess meat, the calcium absorption is inhibited.

<u>Increased</u>	Increased calcium is increased in many endocrine disorders, bone fractures, osteoporosis, diuretic use, overuse of
-------------------------	--

	antacids, free radical pathology, toxic metal load, and excess vitamin D intake. Also seen with poor fat emulsification with insufficient intestinal absorption of fat.
<u>Decreased</u>	Decreased calcium is decreased in malabsorption syndromes, low HCl production, diarrhea, laxative use, hypothyroidism, hyperparathyroidism, osteoporosis, decreased ovarian function, pregnancy, some liver and kidney diseases, and from inadequate intake. Sub-optimal levels may mean incomplete protein assimilation and poor fatty acid metabolism.

PHOSPHORUS

My phosphorus level is _____

Optimal is 3.0-4.5 mg/dl (higher during bone growth)

Phosphorus is intimately related to calcium. Often when phosphorus levels rise, calcium levels fall, and vice versa. Most people get adequate amounts in their diet and supplementation is rarely warranted. If there is an excess of phosphorus being ingested, calcium supplementation is often needed.

<u>Increased</u>	Increased phosphorus levels may indicate a deficiency of hydrochloric (HCl), which is needed for proper digestion. Other causes include excess vitamin D intake, kidney or liver dysfunction, diabetes, and bone fracture in healing stages.
<u>Decreased</u>	Decreased levels may be due to poor starch digestion. Phosphorus levels may be <u>depressed</u> by excess sugar, copper, iron, and aluminum. Also caused by low protein intake or low HCl, vitamin D deficiency and diabetes. Sub-optimal levels can be an indicator of poor sugar digestion.

VITAMIN D

My vitamin D level is _____



Optimal is 18-78 pg/mL for women

Optimal is 18-64 pg/mL for men

This test (1,25-dihydroxyvitamin D a.k.a. D3) is most strongly associated with overall health.

<u>Increased</u>	Increased vitamin D is a rare but potentially serious condition, often occurring when too much vitamin D has been taken (often from high-dose supplements). This can cause abnormally high blood calcium levels which can affect bones, tissues, and other organs.
<u>Decreased</u>	Decreased levels of vitamin D is often associated with rickets (a bone mineralization disease) but is now becoming more notable for protecting against multiple health conditions (cardiovascular disease, brain/cognition, cancer, etc.).

MAGNESIUM

My magnesium level is _____

Optimal is 1.3-2.1 mEq/L

Magnesium is necessary for ATP (energy) metabolism. It also regulates neuromuscular activity and is needed for blood clotting and calcium absorption/metabolism. Its measurement is an index to metabolic activity in the body and kidney function.

<u>Increased</u>	Increased magnesium levels can be due to decreased kidney function, diabetic acidosis, hyperthyroidism, adrenal dysfunction, use of antacids containing magnesium, dehydration and diuretic use.
<u>Decreased</u>	Decreased levels are from chronic diarrhea, chronic kidney, liver or pancreatic disease, hepatitis diuretic use, ulcerative colitis, thyroid dysfunction, epilepsy, malabsorption, chronic alcoholism, or prolonged stomach damage.



Gastrointestinal Function

TOTAL PROTEIN

My total protein is _____

Optimal is 6.0-8.3 g/dL

To evaluate total protein, we need to look at albumin and globulin which make up the total protein. Albumin is made by the liver and makes up about 60% of the total protein. Globulins make up the remaining 40% in the blood, and are produced by the liver and immune system.

ALBUMIN

My total albumin is _____

Optimal is 3.4-5.4 g/dL

Albumin is a protein synthesized by the liver which is very important for maintaining proper fluid balance in the body. It is also the prime carrier protein in the body, which transports hormones, and other substances in the blood.

<u>Increased</u>	Increased albumin may be due to dehydration, improper protein utilization, liver dysfunction, hypothyroidism, or sclerosis of arteries.
<u>Decreased</u>	Decreased levels are common in infections, vit C deficiency, free radical pathology, hyperthyroidism, low HCl production, pernicious anemia, low protein intake, liver disease, gastrointestinal diseases (ex. ulcers), some kidney diseases, and sclerosis of veins. When albumin levels are low, edema is a common symptom.



GLOBULIN

My globulin level is _____

Optimal is 2.0-3.5 g/dL

To obtain globulin levels, the albumin level is subtracted from the total protein.

<u>Increased</u>	Increased globulin may be due to chronic infections, parasite infestation, kidney infections, stress, low HCl production, arthritis, hepatitis and other liver diseases.
<u>Decreased</u>	Decreased globulin may be due to anemia (severe), malnutrition, gastritis, low HCl production, liver dysfunction, malabsorption syndrome and depressed immune systems.

A/G RATIO (Albumin/Globulin ratio)

My A/G ratio is _____

Optimal is 1.1-2.5

The A/G ratio is the ratio of albumin to globulin present in the serum.

<u>Increased</u>	Increased ratio indicates the blood is too “thick” and there will be a tendency to clot more readily. This can occur with genetic deficiencies and leukemias.
<u>Decreased</u>	Decreased ratio may be due to ulcerative colitis, severe infections, kidney problems, hepatitis, autimmunity and various other conditions.

The next five tests are specific indicators of liver function.

TOTAL BILIRUBIN

My total bilirubin is _____



Optimal is 0.-1.0 mg/dl

Bilirubin is a by-product of hemoglobin breakdown, and serves as an indicator of liver, spleen, and gallbladder function.

<u>Increased</u>	Increased bilirubin indicates liver and spleen dysfunction, hepatitis, mononucleosis, a prolonged fasting state or an inflammation of the gallbladder. Supra-optimal levels indicate a problem in fighting toxins.
<u>Decreased</u>	Decreased bilirubin indicates an inefficient blood cell breakdown by the spleen, anemia, biliary obstruction, or a sluggish liver. Sub-optimal levels may mean a problem fighting infections.

ALP (Alkaline Phosphatase)

My alkaline phosphatase level is _____

Optimal is 44-147 IU/L (for adults)

This test is an indicator of liver/gallbladder disease and when there is some type of bone disorder. The level of ALP will normally be much higher in children due to bone formation.

<u>Increased</u>	Increased levels may be seen with bone loss, free radical pathology, congested (overworked) liver, hepatitis, pancreas dysfunction, rheumatoid arthritis, parasites, vitamin D deficiency, pregnancy, or overactive thyroid/parathyroid/adrenal glands.
<u>Decreased</u>	Decreased levels may indicate excess vitamin D ingestion, a deficiency of vitamin C, B ₆ , B ₁₂ , folic acid or zinc, malabsorption syndromes, poor protein/fat digestion, low protein diet, or decreased thyroid or adrenal function.



SGOT (Serum Glutamic Oxaloacetic Transaminase)/ AST)

My SGOT level is _____

Optimal is 8-45 IU/L

This enzyme is present in tissues of high metabolic activity i.e., heart, liver, kidney, brain, pancreas, spleen lung and muscle.

<u>Increased</u>	Any disease-causing changes in tissues will cause an increase in SGOT. It is also increased in mono/Epstein-Barr infection and free radical pathology.
<u>Decreased</u>	Decreased levels may be a more severe sign of liver damage, vitamin B ₆ deficiency, or may be normal to certain individuals.

SGPT (Serum Glutamic Pyruvic Transaminase)/ ALT

My SGPT level is _____

Optimal is 7-55 IU/L

This test is a sensitive indicator of liver disease, although large amounts of tissue damage in the kidney, heart, and skeletal muscle may also affect levels.

<u>Increased</u>	Increased levels are an indicator of liver function. Heightened levels may be associated with liver damage or scarring, mononucleosis, alcohol-related liver function changes, and some drugs (statins, aspirin, some sleep aids).
<u>Decreased</u>	Decreased levels may be a more severe sign of liver damage, vitamin B ₆ deficiency, or may be normal to certain individuals.

GGT (Gamma Glutamyl Transferase)

My GGT level is _____

Optimal is 5-30 IU/L

GGTP is believed to function in the transport of amino acids and small proteins into cells across the cell membrane. This test is used to determine liver cell dysfunction to detect alcohol-induced liver disease.



<u>Increased</u>	Increased in chronic alcoholism, gallbladder disease, pancreatic disease, and from liver-toxic drugs.
<u>Decreased</u>	Decreased with vitamin B6 deficiency.

LDH (Lactate Dehydrogenase)

My LDH level is _____

Optimal is 140-280 IU/L

LDH is found in almost all tissues of the body. If the level is very high, further testing can be done to see if the high levels are due to problems with the heart, liver, kidney, or skeletal muscle. Sometimes an increased LDH indicates diabetic tendencies.

<u>Increased</u>	Increased level will indicate liver, heart, or skeletal muscle tissue breakdown and is associated with various diseases. Supra-optimal levels indicate high blood sugar.
<u>Decreased</u>	Decreased level is seen after x-ray irritation and sometimes hypoglycemia.

Electrolytes (Sodium, Potassium, Chloride, and CO₂)

These four tests need to be examined as a unit for proper evaluation. The complex interactions of their electrolytes will not be completely discussed in this handout. These elements have multitude of cellular functions, are involved in proper water balance, and help regulate the acid-base condition of the body.

Below are listed some common diseases associated with alterations with these levels:

SODIUM

My sodium level is _____

Optimal is 135-142 mmol/L



Reflects body fluid control, nerve condition and kidney/adrenal function.

<u>Increased</u>	Increased sodium may occur when there is an increased loss of water due to vomiting, some drugs like diuretics, and large amounts of coffee, water softener use, and dehydration. Also increased with adrenal stress and diabetes
<u>Decreased</u>	Decreased sodium may be occur due to certain medications (ex. Diuretics, antidepressants, pain medications), heart/kidney/liver problems, chronic/severe vomiting or diarrhea, hormonal changes, or drinking too much water.

POTASSIUM

My potassium level is _____

Optimal is 3.5-5 mmol/L

This mineral is very important for proper muscle and heart contraction, nerve conduction, and maintaining fluid balance.

<u>Increased</u>	Increased level may occur with dehydration, congestive heart, acidosis, kidney diseases, tissue destruction, asthma and emphysema, overworked adrenals, and endocrine imbalances.
<u>Decreased</u>	Decreased potassium may occur in adrenal breakdown, conditions of stress, alkalosis, anemia, heart weakness, many gastrointestinal conditions like diarrhea and vomiting, malabsorption, low salt diet, drugs like diuretics and caffeine, crash dieting, a high-refined food diet, and chronic licorice intake (ex. licorice tea).

CHLORIDE

My chloride level is _____

Optimal is 95-105 mmol/L

Reflects proper fluid exchange across cell membranes.

<u>Increased</u>	Increased chloride levels may be seen in dehydration, overactive adrenals, diabetes, some kidney diseases, anemia, and overuse of aspirin or salt. This may indicate too much water is crossing cell membranes.
<u>Decreased</u>	Decreased levels may be seen in excessive sweating, diarrhea, ulcerative colitis, acute infections such as pneumonia, diuretic use, underactive adrenals, diabetes and heart failure. This is an indication that not enough water is crossing cell membranes.

CO₂

My CO₂ level is _____

Optimal is 23-29 mmol/L

Carbon dioxide is a waste gas produced by the blood in exchange for oxygen and reflects the acid-base to balance your blood.

<u>Increased</u>	CO ₂ is increased in fever, alkalosis, overactive adrenals, loss of HCl due to vomiting, and respiratory distress.
<u>Decreased</u>	CO ₂ is decreased in acidosis, renal stress, dehydration and diabetes.

Cardiovascular Markers

CHOLESTEROL (Cardio)

My cholesterol level is _____

Optimal is 160-180 mg/dL

Cholesterol is used by the body to form hormones, bile acids and cell membranes. Because of the role the liver plays in cholesterol metabolism, cholesterol levels are often used as an indicator of liver function.

<u>Increased</u>	Increased cholesterol levels are a risk factor for heart disease. High levels are often not reduced solely by eating a low
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	cholesterol diet because your body produces more cholesterol than you probably ingest. The problem is one of utilizing the cholesterol properly. High fat and sugar diets often contribute in combination to increasing cholesterol levels when proper nutrients are lacking. The B-complex vitamins (especially B ₆) are very important in these biochemical pathways. These, along with a properly functioning liver and GI tract, can help in reducing high cholesterol levels. Some foods, like garlic, oatmeal, barley, yogurt, and members of the legume family (beans, peas, etc.) have been shown to decrease cholesterol levels.
<u>Decreased</u>	Decreased cholesterol is seen with improper liver function, fat-congested liver, malnutrition, depressed immune function, shingles, low protein intake, cardiac dysfunction, some anemia's, free radical stress, arteriosclerosis, and multiple sclerosis.

TRIGLYCERIDES

My triglyceride level is _____

Optimal is 50-150 mg/dL

Triglycerides are produced in the liver. This test is an indication for the body's ability to metabolize fat. It's good to have nice and low triglycerides, but they can't be too low, otherwise you are not absorbing fat.

<u>Increased</u>	Increased triglycerides are a risk factor for heart disease and may indicate improper diet (high carb and fat intake) and lack of exercise. It may also be due to insulin resistance, hyperinsulinemia, alcoholism, gout, B ₁₂ deficiency, anemia, or pregnancy. In some people excess fructose ingestion can increase triglycerides.
<u>Decreased</u>	Decreased level may be due to overactive glands, low protein diet (vegetarians), free radical pathology, autoimmune disease, decreased immune function, infections, or inadequate pancreatic and/or liver function.



HDL (High Density Lipoproteins)

My HDL level is _____

Optimal is 40-80 mg/dL

HDL is commonly referred to as “good” cholesterol because it flushes away fatty acids. When HDL is above 60 there is often a cardiovascular benefit.

<u>Increased</u>	Increased levels are caused by certain hormones, exercise and fitness level, medications, genetic conditions, and more. There is a benefit to higher HDL levels, however it is the ratio of HDL to LDL that matters, as high HDL levels can also be detrimental to health.
<u>Decreased</u>	Decreased levels can be a reflection of obesity, lack of exercise, diabetes, or a high carb diet.

LDL (Low Density Lipoproteins)

My LDL level is _____

Optimal is 85-120 mg/dL

LDL is the so-called “bad” cholesterol that carries fat into the tissues. LDL itself isn’t inherently bad, but when combined with inflammation it begins to create problems.

<u>Increased</u>	LDL is caused by the same factors that increase triglycerides (see above).
<u>Decreased</u>	Decreased LDL is often associated with a cardiovascular benefit, however you do need some LDL for optimal health.



White Blood Cell Breakdown (The Differential)

The next five tests are a breakdown of the type of white blood cells. This breakdown gives us much information about infections, parasites, allergies, and much more. This called the DIFFERENTIAL:

SEGS (Segmented Neutrophils)

My percentage is _____

Optimal level is 40-60%

These are the most numerous of our white blood cells and our first line of immune defense.

<u>Increased</u>	Segs increase in acute bacterial infections like Strep and Staph, poisoning like lead and mercury, drugs like digitalis and epinephrine, hemorrhage, certain cancers, parasitic infestations, gout, toxic exposure, strenuous exercise, or any inflammatory process.
<u>Decreased</u>	Decreased in segs may indicate a deficient immune system, a chronic infection, childhood disease, or various nutritional deficiencies, especially of high-quality protein, folic acid and B ₁₂ .

LYPHHS (Lymphocytes)

My percentage is _____

Optimal is 20-40%

Lymphocytes are a type of small white blood cell that is present in the lymphatic system. They help the body to distinguish 'foreign' versus 'self' cells.

<u>Increased</u>	Increased level indicates a viral infection due to colds or influenza. These are the most common types of viral infection.
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	Usually when this level rises, the segs value decreases proportionately. This level may be increased in long standing infection or the recovery phase of an acute infection when the defense system has been overwhelmed. Other causes include radiation, lead poisoning, parasites, hyperthyroidism, depressed pituitary or adrenal function, and stress.
<u>Decreased</u>	Decreased levels make it hard for your body to fight infections and there may be an increased susceptibility to infections from viruses, fungi, parasites, or bacteria.

MONOCYTES

My percentage is _____

Optimal is 2-8%

Monocytes are a type of white blood cell that fight certain infections and help other white blood cells remove dead or damaged tissues, destroy cancer cells, and regulate immunity against foreign substances.

<u>Increased</u>	Monocytes are classically elevated in mononucleosis. Other bacterial infections (such as TB), collagen disease, systemic inflammation, recovery from infection, prostatic inflammation, parasites, hepatitis, and a sluggish liver can also increase monocyte levels.
<u>Decreased</u>	Decreases are seen with prednisone treatment (or may be normal)

EOSINOPHILS

My percentage is _____

Optimal is 1-4%

Eosinophils are a disease-fighting white blood cell which help to promote inflammation and play a beneficial role in isolating and controlling infection and foreign substances.

<u>Increased</u>	Increased levels are very good indications or hypersensitive or allergic individuals, parasite infestation, and conditions like hay fever and bronchial asthma. Other causes include bodily stress. (0% may also be normal)
<u>Decreased</u>	Decreased levels can occur with Cushing syndrome, bloodstream infections (sepsis), alcohol consumption, hormone/stress levels, and treatment with corticosteroids.

BASOPHILS

My percentage is _____

Optimal is 0.5-1%

Basophils are white blood cells that play a part in "immune surveillance". This means they help detect and destroy some early cancer cells and they also release the histamine during allergic reactions or an asthma attack.

<u>Increased</u>	Increased levels may show up with parasitic infestation, chronic inflammation of the sinuses, influenza, hypothyroidism, chicken pox, after radiation, and certain hemolytic anemias.
<u>Decreased</u>	Decreased basophils are seen with acute allergic reactions, hyperthyroidism, stress reactions, and after prolonged steroid therapy. (0% may also be normal).

URINALYSIS

SPECIFIC GRAVITY

My specific gravity level is _____

Optimal is 1.005-1.030

Reflects the concentration of urine.

<u>Increased</u>	Increased specific gravity means the urine is too concentrated and may be due to decreased fluid intake, water loss (fever, sweating, vomiting, diarrhea), diabetes, heart failure, or adrenal insufficiency.
<u>Decreased</u>	Decreased specific gravity means the urine is too dilute, and may be due to low minerals, excess hydration, diuretics use, protein in the urine, diabetes insipidus or kidney dysfunction.

pH

My pH level is _____

Optimal is 7.35-7.45

The acid-base balance of the body. For the body to function optimally, it must maintain a stable pH.

<u>Increased</u>	Increased pH means the urine is too alkaline and may be due to urinary tract infection, respiratory or metabolic alkalosis (hyperventilation, vomiting), adrenal excess, a diet high vegetables, citrus fruits and dairy products, gastric obstruction, aspirin overuse, chronic kidney failure, ingestion of alkalinizing agents.
<u>Decreased</u>	Decreased pH means the urine is too acidic, and is found in respiratory or metabolic acidosis (seen in asthma, chronic bronchitis and diabetes), adrenal deficiency, potassium deficiency, diarrhea, dehydration, starvation, high protein diets, acidifying foods.

Inflammatory Markers

The next two tests are proinflammatory cytokines and associated with cardiovascular problems and obesity.



TNF- α (Tumor Necrosis Factor - Alpha)

My TNF-α level is _____

Optimal is 0-2.8 pg/mL

This test is used to find elevated levels of TNF-α. Its primary role is regulation of immune cells.

<u>Increased</u>	Increased levels indicate sepsis, cachexia, AIDS, Hepatitis C, transplant rejection, inflammation, various infectious and autoimmune diseases.
<u>Decreased</u>	Decreased TNF-α levels have been linked to autoimmunity (ex. rheumatoid arthritis, inflammation).

IL- 6 (Interleukin - 6)

My serum IL-6 level is _____

Optimal is 0-17.4 pg/mL

Interleukin-6 is an element that plays a role in bodily defense and is crucial in inflammatory processes.

<u>Increased</u>	Increased levels indicate sepsis, autoimmune diseases, lymphomas, AIDS, alcoholic liver disease, tumor development, and Alzheimer’s disease. Elevated levels are also associated with increased risk of heart attack, and stroke.
<u>Decreased</u>	IL-6 should be present in low levels or not detected (high levels associated with inflammatory conditions).

hs-CRP (High Sensitivity C-Reactive Protein)

My hs-CRP level is _____

Optimal is <3 mg/L



Hs-CRP is used to assess cardiovascular risk but is a test for inflammation in the body.

<u>Increased</u>	Increased levels are associated with inflammation. This can indicate cardiovascular risk (heart attack, stroke, sudden cardiac death, peripheral artery disease) but can be caused by a wide variety of conditions (infections, cancer, autoimmunity, being overweight, etc.). With increased levels, the test should probably be repeated and monitored.
<u>Decreased</u>	hs-CRP levels should be low, as this means that there is little bodily inflammation. This is usually associated with exercise, a healthy diet, no smoking, healthy weight maintenance, etc.

HOMOCYSTEINE

My homocysteine level is _____.

Optimal is <4-14 µmol/L

Homocysteine is an amino acid produced when proteins are broken down and is used as a marker for inflammation.

<u>Increased</u>	Increased levels usually indicate a deficiency in vitamin B-12 or folate and can be associated with psoriasis, thyroid hormone imbalance, kidney disease, medications, genetics, weakness, fatigue, and mood imbalances.
<u>Decreased</u>	Low homocysteine levels are common because the body breaks down the amino acid into usable compounds.

Neuroendocrine and Immune Markers

The next two tests are markers of neuroendocrine and immune disorders.



IGF-1 (Insulin-Like Growth Factor 1)

My IGF-1 level is _____

Optimal is 50-350 ng/mL (depends significantly on age – compare to blood report age range reference)

This test reflects the average growth hormone (GH) production, not the actual amount of GH in the blood. This is accurate to the point at which the liver’s capacity to produce IGF-1 is reached. With severely increased GH production, IGF-1 levels will stabilize at an elevated maximum concentration.

<u>Increased</u>	Increased levels of IGF-1 usually indicate an increased production of GH. This is normal during puberty and pregnancy. Otherwise, it is an indicator of pituitary tumors (usually benign). This with addition to other abnormal pituitary hormone levels indicates a condition causing hypopituitarism.
<u>Decreased</u>	Decreased levels indicate a deficiency of GH or insensitivity to GH. In a child a GH deficiency may cause short stature and delayed development. A decrease in IGF-1 can be a result of pituitary damage following trauma, infections and inflammation. It may also be seen in nutritional deficiencies including anorexia, chronic kidney or liver disease, inactive/ ineffective forms of GH and with high doses of estrogen.

IGF-1R (Insulin-Like Growth Factor 1 Receptor)

My IGF-1R level is _____

***At the time of this publication there is no standard optimal level for IGF-1R. This test is important so we want to be sure to include it here so you ask for it by name. Many labs have their own ranges, so please find out which is optimal for your lab and we will update this as soon as we find a consistent value.**

Insulin-like growth factor 1 receptor mediates the effects of IGF-1 (a hormone similar to insulin). IGF-1 plays an important role in growth (including in adults).



<u>Increased</u>	Increased levels are associated with different types of cancer and/or tumors.
<u>Decreased</u>	Decreased levels can be associated with metabolic syndrome (impaired lipid profiles, insulin resistance, increased glucose levels, obesity and cardiovascular disease).

Glucose, Insulin, Metabolic Syndrome

GLUCOSE

My glucose level is _____

Optimal is 65-110mg/dl

Many factors affect glucose levels. Altered glucose levels may indicate lack of nutrients like chromium, zinc, or the B-complex vitamins, or conditions like diabetes and hypoglycemia.

<u>Increased</u>	Increased glucose indicates a lack of metabolic controls or overproduction of certain hormonal stimulators. Seen in hyperthyroidism, adrenal hyperfunction free radical stress, low vit B1, kidney or heart dysfunction.
<u>Decreased</u>	Decrease glucose can be due to insulin overdose, adrenal hypofunction, pancreatic disease, liver dysfunction, malnutrition, decreased HCl, or hypothyroidism.

INSULIN

My insulin level is _____

Optimal is < 174 pmol/L (fasting)

Insulin is a hormone produced by the pancreas that controls the amount of glucose (sugar) in your bloodstream at any moment. It is also a biomarker for aging.



<u>Increased</u>	Increased insulin levels are usually associated with Cushing’s syndrome, drugs (ex. corticosteroids, levodopa, oral contraceptives), fructose or galactose intolerance, insulinomas, obesity, insulin resistance, such as appears in type 2 diabetes and metabolic syndrome.
<u>Decreased</u>	Decreased insulin levels are seen with diabetes, hypopituitarism, pancreatic diseases such as chronic pancreatitis (including cystic fibrosis) and pancreatic cancer.

INSULIN RESISTANCE

My insulin resistance is _____

Optimal is <33

Insulin resistance is when cells in your muscles, fat, and liver don’t respond well to insulin and can’t use glucose from your blood for energy. To make up for it, your pancreas makes more insulin. Over time, your blood sugar levels go up, as well as inflammation. A score of 33 to 66 suggests that an individual is >4-fold more likely to have insulin resistance than an individual with a score <33.

<u>Increased</u>	Increased insulin resistance is often associated with excess body weight, lack of exercise, poor sleep, hormonal imbalances, etc. As the body becomes more insulin resistant, it must produce more insulin, which eventually contributes to other health conditions (diabetes, metabolic syndrome, etc.)
<u>Decreased</u>	Reduced resistance to insulin indicates that the body is insulin sensitive, and therefore not at immediate risk of diabetes or inflammatory conditions.

HgbA1C (Hemoglobin A1C)

My HgbA1C level is _____

Optimal is 4.2-5.6%

This test reveals how much blood sugar has been around for the preceding three months. It is used as a standard tool to determine blood sugar control in patients



known to have diabetes. There is a 10% decrease for every 1% reduction of HbA1C.

<u>Increased</u>	Increased levels are associated with microvascular complications. Results >5.5% indicates disinsulenemia.
<u>Decreased</u>	Decreased levels are associated with infections, autoimmune diseases, tumors, alcoholism, liver disease, pregnancy, supplements, hemoglobin disorders, and as a side effect of some drugs.

The next two tests should be analyzed together. When ApoB is high and Apo A1 is low they are the best markers for metabolic syndrome.

ApoB (Apolipoprotein B)

My ApoB level is _____

Optimal is <130 mg/dL

Apolipoprotein B (ApoB) is a protein that is involved in the metabolism of lipids and is the main protein constituent of lipoproteins such as very low-density lipoprotein (VLDL) and low-density lipoprotein (LDL, the "bad cholesterol").

<u>Increased</u>	Elevated ApoB confers an increased risk of atherosclerotic cardiovascular disease, even in a context of acceptable LDL cholesterol concentrations.
<u>Decreased</u>	Decreased ApoB (<48 mg/dL) are related to malabsorption of food lipids and can lead to polyneuropathy.

ApoA1 (Apolipoprotein A1)

My ApoA1 is _____

Optimal is > 120 mg/dL for men and > 140 mg/dL for women



Apolipoprotein A1 (ApoA1) is major component of the high-density lipoprotein complex (protective "fat removal" particles). ApoA1 helps to clear fats (cholesterol) and white blood cells from artery walls, making them less likely contribute to progressive atheroma.

<u>Increased</u>	Increased ApoA1 concentrations are more strongly associated with a reduction in risk of a first myocardial infarction than HDL-C concentrations. Increased ApoA1, but not HDL-C concentrations, are associated with reduced cardiovascular events.
<u>Decreased</u>	Decreased ApoA1 confers an increased risk of coronary artery disease. Extremely low ApoA1 (<20 mg/dL) is suggestive of liver disease or a genetic disorder. Low concentrations of ApoA1, but not HDL-C, are predictive of preclinical atherosclerosis.

Thyroid Function Tests

These tests are important for determining how well your thyroid gland is working. Thyroid hormones affect metabolism in 2 main ways: 1) they increase protein synthesis in virtually every body tissue, and 2) they increase oxygen consumption in the liver, kidney, heart, and skeletal muscles.

T-3 (Triiodothyronine)

My T-3 Uptake is _____

Optimal is 70-205 ng/dL for ages 20-50 years, and 40-180 ng/dL >50 years
Triiodothyronine (T3) is a thyroid hormone that can help indicate thyroid function.

<u>Increased</u>	Increased in hyperthyroidism, low protein intake, thyroid therapy, diabetes therapy, kidney dysfunction, aspirin overuse.
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<u>Decreased</u>	Decreased in hypothyroidism, selenium deficiency, pregnancy, thyroid therapy, and estrogen replacement therapy.
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T-4 (Thyroxine)

My total T-4 level is _____

Optimal is 5.4-11.5 mcg/dL

Thyroxine is the main hormone secreted into the bloodstream by the thyroid gland.

<u>Increased</u>	Increased in in the same situation as T-3 Uptake (see above). Also increased in liver cirrhosis, pregnancy, drug overuse, and liver dysfunction.
<u>Decreased</u>	Decreased in the same situation as T-3 Uptake (see above). Also decreased in diabetes, low protein diet, kidney dysfunction and anterior pituitary dysfunction.

T-7 (Free Thyroxine)

My free T-4 (T-7) level is _____

Optimal is 0.7-1.8 ng/dL

T7 is a test that is used correct for certain medications and other hormones that may alter the routine T4 test and is a good measure of thyroid function.

<u>Increased</u>	Increased in the same situation as T-3 Uptake (see above). Also increased in liver cirrhosis, pregnancy, drug overuse, and liver dysfunction.
<u>Decreased</u>	Decreased in the same situation as T-3 Uptake (see above). Also decreased in diabetes, low protein diet, kidney dysfunction and anterior pituitary dysfunction.



TBG (Thyroid Binding Globulin)

My TBG level is _____

Optimal is 1.1-2.1 mg/dL

Most circulating thyroid hormones in the blood are attached to a protein called Thyroid Binding Globulin (TBG). If there is an excess or deficiency of this protein it alters the T4 or T3 *measurement* but does not affect the *action* of the hormone.

<u>Increased</u>	Increased in hypothyroidism, pregnancy, estrogen replacement or oral contraceptive use, acute infectious hepatitis, liver cirrhosis, and blood disorders.
<u>Decreased</u>	Decreased TBG is seen with large protein losses, anabolic steroid use (including testosterone), and overactive pituitary.

TSH (Thyroid Stimulating Hormone)

My TSH level is _____

Optimal is 2.0-10 μ U/mL

Thyroid Stimulating Hormone (TSH) is the hormone produced by the pituitary gland that stimulates the release of thyroid hormones.

<u>Increased</u>	Increased in hypothyroidism and liver cirrhosis.
<u>Decreased</u>	Decreased in hyperthyroidism, pregnancy, and anterior pituitary dysfunction.

Hormone Profiles

FREE TESTOSTERONE

My free testosterone level is _____



Optimal is 8-60 ng/dL for women (ages 19+)

Optimal is 250-1000 ng/dL for men (ages 19+)

Testosterone is a steroid hormone that regulates sex drive (libido), bone mass, fat distribution, muscle mass and strength, and the production of red blood cells and sperm. In women, most testosterone is converted to estradiol, the main sex hormone in females.

<u>Increased</u>	Increased free testosterone for men may be related to hormonal imbalance, adrenal or testicular tumors, or use of steroids. For women, increased testosterone is associated with polycystic ovary syndrome (PCOS), ovarian or adrenal gland tumor, testosterone exposure (ex. Topical products).
<u>Decreased</u>	Decreases in testosterone naturally occur with age, but may also be associated with chronic diseases (diabetes, liver or kidney disease, autoimmunity), physical injury to testes, viruses, certain medications, infertility, and some genetic conditions.

DHEA-S (DHEA-Sulfate Test)

My DHEA-sulfate level is _____

Optimal is 35-430 mcg/dL for females >20 years of age

Optimal is 80-560 mcg/dL for males

DHEA stands for dehydroepiandrosterone. It is a weak hormone (androgen) produced by the adrenal glands in both men and women. The DHEA-sulfate test measures the amount of DHEA-sulfate in the blood, which is useful as an adjunct in the diagnosis of congenital adrenal hyperplasia.

<u>Increased</u>	Increased levels suggest that the body is making too much of the hormone. This excess may be related to adrenal cancer, tumors, or excess growth of adrenal hormone-producing tissue (hyperplasia), as well as stress, and can cause hair loss, fertility issues, PCOS, and acne.
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<u>Decreased</u>	Decreased levels indicate adrenal insufficiency, but is also associated with diabetes, dementia, libido issues, erectile dysfunction, osteoporosis, lupus, and chronic fatigue.
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ESTRADIOL

My estradiol level is _____

Optimal is 30 to 400 pg/mL for premenopausal women, but levels vary greatly throughout the menstrual cycle and are as follows: follicular phase: 20-350 pg/mL, midcycle peak: 150-750 pg/mL, luteal phase: 30-450 pg/mL, and postmenopause: ≤ 20 pg/mL. For adult males, optimal range is 10-50 pg/mL.

An estradiol test (a.k.a. an E2 test) measures the amount of estradiol in your blood. Estradiol is a form of the hormone estrogen. In women, estradiol is produced in the ovaries, adrenal glands, the breasts, and the placenta during pregnancy. In men, estradiol plays a critical role in sexual function and is essential for modulating libido, erectile function, and spermatogenesis.

<u>Increased</u>	Increased levels in women are associated with acne, constipation, loss of sex drive, weight gain, menstrual problems, and depression. If the levels are extremely high, they can increase the risk of uterine and breast cancer as well as cardiovascular disease. In men, increased levels are associated with gynecomastia, erectile dysfunction and issues with spermatogenesis.
<u>Decreased</u>	Decreased levels indicate polycystic ovary syndrome (PCOS) or hypopituitarism and are also associated with eating disorders or extreme endurance exercise. Levels also decrease post menopause. Low levels in men aren't a big cause for concern.

Estrogen imbalances can result from hypogonadism, a condition that results in a lack of hormone production in your body. Hypogonadism can lower levels of estrogen, testosterone, and other hormones, leading to many of the same symptoms of high estrogen levels, and is associated with autoimmune



conditions, genetic disorders, infections of sexual organs, kidney or liver conditions, undescended testicles, and an overabundance of iron in your blood (hemochromatosis).

2:16 (OH) (HYDROXYESTRONE)

My 2:16 (OH) ratio is _____

Optimal is 0.98 – 1.74; 1.5-2.74 for pre-menopausal; and 1.15-2.25 for menopausal women

The two major types of estrogen are 2- and 16-hydroxyestrone (2-OH and 16-OH, respectively). 2-OH is the good metabolite, and does not stimulate cell growth (it blocks the action of stronger estrogens that may be carcinogenic). 16-OH has a significantly stronger estrogenic activity, and studies show that it may increase the risk of breast cancer. 2:16 OH is the ratio of 'good' to 'bad' estrogen.

<u>Increased</u>	Increased 2:16 OH suggests a low risk for breast cancer (indicator of high 'good' estrogen).
<u>Decreased</u>	Decrease 2:16 OH is an indicator of high 'strong' estrogen, which can be associated with obesity, hypothyroidism, inflammation, as well as increased risk of breast cancer. This may indicate poor estrogen metabolism.

PROGESTERONE

My progesterone level is _____

Optimal levels vary throughout the menstrual cycle and during pregnancy, and are as follows for an adult female: follicular phase: < 50 ng/dL, luteal phase: 300-2500 ng/dL, and postmenopausal: < 40 ng/dL. During pregnancy, the ranges are as follows: first trimester: 725-4400 ng/dL, second trimester: 1950-8250 ng/dL, and third trimester: 6500-22,900 ng/dL. For adult males the optimal range is 10-50 ng/dL.

Progesterone is a steroid hormone released by the corpus luteum that stimulates the uterus to prepare for pregnancy. Progesterone is an endogenous steroid sex



hormone involved in the menstrual cycle, pregnancy, and embryogenesis. For men, progesterone also plays an important role in the production of testosterone.

<u>Increased</u>	High levels have very few known serious medical consequences. Levels increase naturally during pregnancy, and otherwise may be associated with congenital adrenal hyperplasia. In some cases high progesterone levels may suggest an increased risk of breast cancer.
<u>Decreased</u>	Decreased levels in women are sometimes indicated with headaches and migraines, mood changes, anxiety, depression, irregular (or absent) menstrual cycles. Low levels are also associated with abnormal uterine bleeding in women who aren't pregnant, as well as fertility issues. In men, decreased levels are associated with libido issues, hair loss, erectile dysfunction, osteoporosis, arthritis, increased risk of prostate cancer, weight gain, and fatigue.

CONCLUSION

At Julie E Health we believe that knowledge is power. The first step in taking your health into your own hands is to learn about what's going on in your body, which is why we created this blood profile. Remember that the act of drawing blood and fasting can raise cortisol levels and stress, so we recommend additional saliva tests to evaluate hormone levels. We also suggest saving your results and redoing the tests in 3-6 months to see if you are improving. When your blood values improve, so does your health!

It's important to understand that traditional lab tests aren't sensitive enough to detect blockages in a system, or minor issues that may evolve into more significant problems – they only show when something is actually wrong. This is where Julie E can help! Using energy tests and a full array of alternative lab testing methods we can detect blockages, toxicity, infections, and deficiencies right now (*before* they start causing significant problems). Most of these tests can be done in the



comfort of your own home, and we are happy to guide you in finding which tests are the best fit for you! At Julie E Health, we're in the business of changing lives and providing SIMPLE SOLUTIONS for health. If you would like guidance on how to improve your blood test results, book an appointment today for a healthier tomorrow!

LAB TESTS

While standard blood tests do provide some good information, they only present a small fraction of values that can be used to understand your health status as a whole. For a better picture of overall health, we offer other tests that give you SPECIFICS of what's going on, and better yet, help you understand WHY!

<p>Glyphosate Test</p>	<p>What if your symptoms aren't because of a bug, sickness, or deficiency? It may be toxicity! Test your exposure to glyphosate, the most widely used weed killing chemical on farms, lawns, schoolyards and golf courses. We have this quick urinalysis kit in stock for you and your children!</p>	<p>\$124</p>
<p>Telomere Test</p>	<p>Imagine if you could tell how quickly your cells were aging? With our telomere test, you can see how your cells' genetic material compares with your chronological age! Learn about levels of inflammation, oxidative stress, risk factors, and so much more...and more importantly, gain insight into how you can start aging in reverse! Please note that blood draw has to be done independently.</p>	<p>\$194 + Blood draw</p>
<p>NutrEval</p>	<p>NutrEval is a comprehensive, functional nutritional assessment. It's so much more than a simple blood test! Learn not just about your vitamin and mineral status, but ALSO fatty acid imbalances, oxidation</p>	<p>\$504 without Vit. D</p>

	<p>status, toxicity, mitochondrial function, digestive issues, metabolism...the list goes on!</p> <p>This test is the base Nutraeval with 3 genetic add-ons (TNFA, MTHFR, COMT). TNFA determines if your body is at a naturally increased risk for inflammation. MTHFR is a key component in the body's methylation cycle and is a regulatory enzyme in the body's production of folate. Mutations in MTHFR can cause underlying health conditions. COMT is also a key component in the methylation cycle and is used to help the body get rid of excess hormones – this is important in understanding how certain bodies react to stress and hormone changes. For a total picture of nutrition and metabolism, this is the test for you!</p>	<p>\$539 with vit. D</p>
<p>Micronutrient Test</p>	<p>This complete micronutrient profile covers vitamins, minerals, carbohydrate metabolism, immune function, antioxidant status, amino acids and metabolites to give you invaluable insight into functional and borderline deficiencies. On top of that, the results provide you with actionable guidelines for supplementation and dietary sources of needed nutrients.</p>	<p>\$345</p>
<p>1-Day Hormone Assessment</p>	<p>This 1-day hormone assessment uses multiple saliva samples to measure cortisol and DHEA. This can help us understand the body's daily rhythm and potential hormonal imbalances related to stress, which can be the cause of many underlying health conditions.</p>	<p>\$185</p>